\*95820\*

Page 1

| January-10-13                  | 11.29.13 AM           |                  |             |                   |                         |             |            |              |               |               |            |                  |                |      |
|--------------------------------|-----------------------|------------------|-------------|-------------------|-------------------------|-------------|------------|--------------|---------------|---------------|------------|------------------|----------------|------|
| Item ID:<br>Revision ID:       | D2332-041             |                  |             |                   | Accept                  | *N900       | <b>040</b> | 100          | * 8           | Setup St      |            |                  | S1*            |      |
| Item Name:                     | Lid Prop Assembly 6.6 | 9" long          |             |                   |                         |             |            |              |               | Si            | top        | *N:              | S2*            |      |
| Start Date:                    | 1/16/13 <b>Start</b>  | <b>Qty:</b> 6.00 |             | *6*               |                         | Cust Item I | D:         |              |               |               |            |                  |                |      |
| Required Date:                 |                       | Qty: 6.00        |             | *6*               |                         | Customer:   |            |              |               |               |            |                  |                |      |
| Reference:                     |                       |                  | ٠.          | ( )               |                         |             |            |              |               |               |            |                  |                |      |
| Approvals:                     | Process Plan:         | W                | Date:       | 13-01-21          | _ Tooling:              | Da          | ıte:       |              | F             |               | art<br>top | *N               | R1*            |      |
|                                | QC:                   |                  | Date:       |                   | _ SPC (Y/N):            | Da          | nte:       |              |               | 50            | ОР         | *NI              | R2*            |      |
| Sequence ID/<br>Work Center II | Opera<br>D Descri     |                  |             |                   | Set Up/<br>Run Hours    | Tool ID     | Tool#      | Plan<br>Code | Accept<br>Qty | Reject<br>Qty |            | Reject<br>Number | Insp.<br>Stamp |      |
| Draw Nbr                       | Revision N            | br               |             |                   |                         |             |            |              |               |               |            |                  |                |      |
| D2332                          | Rev C1                | !                |             |                   |                         |             |            |              |               |               |            |                  |                |      |
| 100                            |                       |                  |             |                   | 0.00                    |             |            |              |               |               |            |                  | F              |      |
| *100*<br>Small Fab             |                       | Memo             |             |                   | 0.00                    |             |            |              | 6             | 7             |            | /                | FF<br>3-03     | -27  |
| Small Fab                      |                       | 1- Cut D233      | 32-7 and D  | 2332-5 to lengh   | t as per dwg D2332.     |             |            |              |               |               |            |                  |                |      |
|                                |                       | 2- Cut D233      | 32-11 using | g 1/2" S.S tubing | g 7.735" long.          |             |            |              |               |               |            |                  |                |      |
|                                |                       | 3- Deburr.       |             |                   |                         |             |            |              |               |               |            |                  |                |      |
| 410                            |                       |                  |             |                   | 0.00                    |             |            |              | _             |               |            |                  | F              |      |
| *110* Brake NC                 |                       | Memo             |             |                   | 0.00                    |             |            |              | _6            | \$            |            |                  | 13-03          | 3-27 |
| Brake NC                       |                       |                  |             | 2-11 to lenght a  | s per dwg D2332 using D | Т8012       |            |              |               |               |            | •                | ** .           |      |

|      |            |                    |                     | DQA: | Date: | • |
|------|------------|--------------------|---------------------|------|-------|---|
| NCD. | Voc. / No. | MODE OPPED NON COM | NEODMANCE / LIDDATE |      | •     |   |

| NCR:                      | CR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE |               |          |        |   |                 |         |                        |            |   |                           |                    |
|---------------------------|--|---------------|----------|--------|---|-----------------|---------|------------------------|------------|---|---------------------------|--------------------|
|                           |  |               |          |        |   |                 |         |                        |            | QA Closed:                                    | Date:                     |                    |
| Work Orde                 | er:  |               |          |        | DISPOSITION   |                 |         |                        | AGAINST DE | PARTMENT                                      | /PROCESS                  |                    |
| Part N                    |  |               |          |        | Rework Skid-tube Crosstube  Scrap Machining Small Fab  Use-as-is Thermoforming Finishing  Work Order Update Large Fab Composite |                 |         | Small Fab<br>Finishing | -          | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |                    |
| Root                      |  |               |          | Descri | ption of work order update  | Init            | tial    | Act                    | ion -      | Sign &  |                           | -                  |
| Cause                     | Dat  | e Step        | Qty      |        | or Non-conformance  | Chief           | f Eng   | Descr                  | ription    | Date  | Verification              | QC Inspector       |
| Doc/Data                  |  |               |          |        |   |                 | ·       |                        |            |   |                           |                    |
| Equip/Tooling             |  |               |          |        |   |                 |         |                        |            |   |                           |                    |
| Operator                  |  |               |          |        |   |                 |         |                        |            | •   |                           |                    |
| Material                  |  |               |          |        |   |                 |         |                        |            |   |                           | •                  |
| Setup                     |  |               |          |        |   |                 |         |                        |            |   |                           |                    |
| Other                     |  |               |          |        |   |                 |         |                        |            |   |                           |                    |
| Process                   |  |               |          |        |   |                 |         |                        |            |   |                           |                    |
| Supplier                  |  |               |          |        |   |                 |         |                        |            |   |                           |                    |
| Training                  |  |               |          |        |   |                 |         |                        |            | :   |                           |                    |
| Unapproved                |  |               |          |        |   |                 |         |                        |            |   |                           |                    |
|                           |  |               |          |        | F   | AULT (          | CATE    | GORY                   |            |   |                           |                    |
| Landir                    | ng Gear  |               |          |        | General   | _               |         |                        |            |   |                           | _                  |
|                           | Bendi  | ng            |          |        | Bend  | ∐G <sub>1</sub> | rain    |                        |            | Ovalized                                      |                           | Pressure/Forced    |
|                           | Centr  | Not Conce     | ntric to | o/s    | BOM/Route   | На              | ardwa   | re                     |            | Over/Under                                    | tolerance                 | Temperature/Cure . |
|                           | Crack  | ;             |          |        | Broken/Damaged  | lin:            | specti  | on Incomplete          | L          | Part Incorre                                  | ct                        | Weld               |
|                           | Crush  | ed/Crimped    | L        |        | Burrs   | lin:            | struct  | ions Incomplete/U      | Jnclear    | Part Lost/Mi                                  | ssing                     | Wrong Stock Pulled |
|                           | Cuffs  |               |          |        | Contamination   | Шм              | lainte  | nance                  |            | Part Moved                                    |                           |                    |
|                           | Heat <sup>-</sup>                                | reat          |          |        | Countersink   | М               | islabe  | led                    | -          | Positioned V                                  | Vrong                     | _                  |
|                           | Inspe  | tion Strip ir | 1 Tube   |        | Cut Too Short   | М               | isread  | I                      |            | Power Loss/                                   | Surge                     | Other              |
| [                         | Ripple   | s in Bend     |          |        | Drill Holes   | Of              | ffset   |                        |            |   |                           |                    |
| Torque Waves in Extrusion |  |               |          | n [    | Drawing   | O               | ut of C | Calibration            |            |   |                           |                    |

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Finish

Folio

| lanuary-18-13                              | 11:29:15 AM                | ·                                  |   | 9:16   | 7/()                   |       |              |        |              |               |                  |                |
|--|----------------------------|------------------------------------|---|--|------------------------|-------|--------------|--------|--------------|---------------|------------------|----------------|
| tem ID:<br>Revision ID:<br>Item Name:      | D2332-041<br>Lid Prop Asse | embly 6.69" long                   |   | Accept   | *N900                  | 040   | 100          | )*     | Setup        | Start<br>Stop | *N:              | S1*<br>S2*     |
| Start Date:<br>Required Date<br>Reference: | 1/16/13<br>e: 1/31/13      | Start Qty: 6.00<br>Req'd Qty: 6.00 | *6*<br>*6*  |  | Cust Item<br>Customers |       |              |        |              |               |                  |                |
| Approvals:                                 | Process Pla                | an:                                | Date:   | Tooling:   |                        | Pate: |              |        | Run          | Start         | *NI              | R1*            |
| ī  | QC:                        |                                    | •   | •  | I                      | Pate: | <del></del>  |        |              | Stop          | *NI              | R2*            |
| Sequence ID/<br>Work Center l              | ID                         | Operation<br>Description           | -   | Set Up/<br>Run Hours<br>0.00                                 | Tool ID                | Tool# | Plan<br>Code | Accept | t Rej<br>Qty |               | Reject<br>Number | Insp.<br>Stamp |
| *120*<br>Small Fab                         |                            | Memo                               |   | 0.00   |                        |       |              | 6      |              | 9             |                  | 13-03          |
| Small Fab                                  |                            | I - Drill hole<br>(drill one pe    |   | D2332 using drill jig DT                                     | 8459                   |       |              |        |              |               |                  | ,              |
|  |                            | 2- Ensure n                        | o forein objects inside tub                             | e  |                        |       |              |        |              |               |                  |                |
| ·  |                            | 3- Deburr                          |   | 43   |                        |       |              |        |              |               |                  |                |
| 130  |                            | QC5- Inspect part comp             | leteness to step on W/O                                 | 0.00   | •                      |       |              | į      |              |               |                  |                |
| *130*<br>QC<br>Quality Control             |                            | Мето                               |   | 0.00 133   | 57                     |       |              | 6      |              | ·             |                  |                |
|  |                            |                                    |   |  |                        |       |              |        |              |               |                  |                |
| 140  |                            |                                    |   | 0.00   |                        |       |              |        |              |               |                  |                |
| *140*                                      |                            |                                    |   |  |                        |       |              | 6      |              | <u>ر</u> خ    | 2 /2             | -3-27          |
| Large Fab<br>Large Fab                     |                            | Memo<br>Weld D233<br>*****ens      | 2-11 and D2332-5 as per<br>sure nothing is inside of to | - 0.00<br>dwg (weld 1 per ass'y)<br>ube before welding****** | **                     |       |              |        |              |               |                  |                |

S.S Rod batch: M 122357

| DOA. | D-4    | • |
|------|--------|---|
| DQA: | _Date: |   |
|      |        |   |

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

|              |                           |            |            |          |      |              |                            |                    |   |                 |           |                           | QA Closed:                                | <b>Date</b>               | :                  |  |  |
|--------------|---------------------------|------------|------------|----------|------|--------------|----------------------------|--------------------|---|-----------------|-----------|---------------------------|---|---------------------------|--------------------|--|--|
| Work Ord     | er:                       |            |            |          |      |              | DISPOSITION                |                    |   |                 | AGAINS    | GAINST DEPARTMENT/PROCESS |   |                           |                    |  |  |
|              |                           |            |            |          |      | Rework Scrap |                            | 1                  | Skid-tube Crosstube Machining Small Fab Thermoforming Finishing R |                 |           | 1                         | Water Jet<br>d. Eng. Coor.<br>e/Packaging | Engineering Quality Other |                    |  |  |
| NCR I        | NCR No. Work Order Update |            |            |          |      |              |                            |                    | Large Fab   |                 |           |                           |   |                           |                    |  |  |
| Root         |                           |            |            |          | Desc | crip         | otion of work order update | Ī                  | nitial  | Α               | ction     |                           | Sign &                                    | `                         |                    |  |  |
| Cause        |                           | Date       | Step       | Qty      | 1    | c            | or Non-conformance         | Ch                 | ief Eng   | Des             | cription  |                           | Date                                      | Verification              | QC Inspector       |  |  |
| oc/Data      |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| quip/Tooling |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| perator      |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| 1aterial     |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| etup         |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| ther         |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| rocess       |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| upplier      |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| raining      |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
| napproved    |                           |            |            |          |      |              |                            |                    |   |                 |           |                           |   |                           |                    |  |  |
|              |                           |            |            |          |      |              | FA                         | <b>AUL</b>         | T CATE  | GORY            |           |                           |   |                           |                    |  |  |
| Landi        | ng (                      | Gear       |            |          | _    |              | General                    |                    | ţ   |                 |           |                           |   |                           |                    |  |  |
|              |                           | Bending    |            |          |      |              | Bend                       |                    | Ġrain   |                 |           |                           | Ovalized                                  |                           | Pressure/Forced    |  |  |
|              |                           | Centre No  | t Concer   | ntric to | o/s  |              | BOM/Route                  |                    | Hardwa  | re              |           |                           | Over/Under                                | tolerance                 | Temperature/Cure   |  |  |
|              |                           | Cracks     |            |          |      |              | Broken/Damaged             |                    | Inspecti  | on Incomplete   |           |                           | Part Incorred                             | :t 🗍                      | Weld               |  |  |
|              |                           | Crushed/0  | Crimped.   |          |      |              | Burrs                      |                    | Instruct  | ions Incomplete | e/Unclear |                           | Part Lost/Mi                              | ssing                     | Wrong Stock Pulled |  |  |
|              |                           | Cuffs      |            |          | ſ    |              | Contamination              |                    | Mainte  | nance           |           |                           | Part Moved                                | _                         | _                  |  |  |
|              |                           | Heat Trea  | t          |          | ſ    |              | Countersink                |                    | Mislabe   | led             |           |                           | Positioned V                              | /rong                     |                    |  |  |
|              |                           | Inspection | Strip in   | Tube     | Ī    |              | Cut Too Short              |                    | Misread   | l               |           |                           | Power Loss/                               | Surge                     | Other              |  |  |
|              |                           | Ripples in | Bend       |          | ſ    |              | Drill Holes                |                    | Offset  |                 |           |                           | •   |                           |                    |  |  |
| ľ            |                           | Torque W   | aves in E  | xtrusio  | n    |              | Drawing                    |                    | Out of C  | Calibration     |           |                           |   |                           |                    |  |  |
|              |                           | Turning Se | equence    |          | ſ    |              | Finish                     |                    | Out of S  | equence         |           |                           |   |                           |                    |  |  |
|              |                           | Wave/Twi   | ist in Tub | e        | Ī    |              | Folio                      | Outside Dimensions |   |                 |           |                           |   |                           |                    |  |  |

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| Work Orde<br>January-18-13             |         |   |                        | *958                         | 320*                  |            |              |               |                   |                  | Page 3       |
|--|---------|---|------------------------|------------------------------|-----------------------|------------|--------------|---------------|-------------------|------------------|--------------|
| Item ID:<br>Revision ID:<br>Item Name: | D2332-0 | Assembly 6.69" long                           |                        | Accept                       | *N900                 | <b>040</b> | 100          | <b>)*</b> s   | etup Star<br>Stop | 11               | IS1*<br>IS2* |
| Start Date: Required Date: Reference:  | 1/16/13 | Start Qty: 6.00<br>Req'd Qty: 6.00            | *6*<br>*6*             |                              | Cust Item I Customer: | D:         |              |               |                   | I                | 107          |
| Approvals:                             |         | s Plan:                                       | Date:                  | Tooling: SPC (Y/N):          |                       | ate:       |              | F             | tun Star<br>Stop  | " <b>[\</b>      | IR1*<br>IR2* |
| Sequence ID/<br>Work Center II         | D       | Operation Description QC9- Inspect visual per | QS1004- Fusion Welds   | Set Up/<br>Run Hours<br>0.00 | Tool ID               | Tool #     | Plan<br>Code | Accept<br>Qty | Reject<br>Qty     | Reject<br>Number | Insp.        |
| *150*<br>QC<br>Quality Control         |         | Memo  |                        | 0.00                         |                       |            |              | <u> </u>      | 13-0              | 3-27             | 09           |
| 160<br>*4.00*                          |         | QC5- Inspect part compl                       | eteness to step on W/O | 0.00                         |                       |            |              | <i>(</i> ()   |                   | - \-             | DAG          |
| *160*<br>QC<br>Quality Control         |         | Memo  |                        | 0.00                         |                       |            |              |               | Be                | 2 <u>-91</u>     | ~89          |
| 170<br>*17 <b>೧</b> *                  |         |   |                        | 0.00                         |                       |            |              | 6             | 24                | 6/3:             | 328          |

0.00

Memo

1- Tumble

2- Assemble as per dwg D2332

Small Fab

Small Fab

6 Bl 13-3-29.

| DQA: | Date: _ | , |  |
|------|---------|---|--|
|      |         |   |  |

WORI

NCR:

Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

|                                   |  |           |            |     |  |                     |  |   | QA Closed:     | Dat                       | te:                |  |
|-----------------------------------|--|-----------|------------|-----|--|---------------------|--|---|----------------|---------------------------|--------------------|--|
| Work Orde                         | r:                                     |           |            |     | DISPOSITION                              |                     | AGAINST DEPARTMENT/PROCESS                 |   |                |                           |                    |  |
| Part No                           | 0.                                     |           |            |     | Rework Scrap Use-as-is Work Order Update | The                 | Skid-tube  Machining  moforming  Large Fab | Crosstube Small Fab Finishing Composite | Pro<br>Rec/Sto | Engineering Quality Other |                    |  |
| Root                              | Root Description of work order up      |           |            |     |  |                     | A  | ction                                   | Sign &         |                           |                    |  |
| Cause                             |  |           |            |     |  | Initial<br>Chief En | g Des                                      | cription                                | Date           | Verification              | n QC Inspector     |  |
| Doc/Data                          |  | İ         |            |     |  |                     |  |   |                |                           | ,                  |  |
| quip/Tooling                      |  |           |            |     |  |                     |  |   |                |                           |                    |  |
| Operator                          | 7                                      |           |            |     |  |                     |  |   |                |                           | ,                  |  |
| Material                          |  |           |            |     |  |                     |  |   |                | ·                         |                    |  |
| Setup                             |  | ]         |            |     | •  |                     |  |   | •              |                           |                    |  |
| Other                             |  |           |            |     |  |                     |  |   |                | :                         |                    |  |
| Process                           |  |           |            |     |  |                     |  |   |                |                           |                    |  |
| Supplier                          | 7                                      |           |            |     |  |                     | 1  |   |                |                           |                    |  |
| Training                          |  |           |            |     |  |                     |  |   |                |                           |                    |  |
| Jnapproved                        |  |           |            |     |  |                     |  |   |                |                           |                    |  |
|                                   |  |           |            |     | F  | AULT CAT            | EGORY                                      |   |                |                           |                    |  |
| Landing                           | g Gear                                 |           |            |     | General                                  |                     |  |   |                |                           |                    |  |
|                                   | Bending                                |           |            |     | Bend                                     | Grain               |  |   | Ovalized       |                           | Pressure/Forced    |  |
|                                   | Centre No                              | ot Concer | ntric to ( | D/S | BOM/Route                                | Hardw               | are  |   | Over/Under     | tolerance                 | Temperature/Cure   |  |
|                                   | Cracks                                 |           |            |     | Broken/Damaged                           | Inspec              | tion Incomplete                            |   | Part Incorre   | ct                        | Weld               |  |
|                                   | Crushed/0                              | Crimped.  |            |     | Burrs                                    | Instru              | ctions Incomplete                          | /Unclear                                | Part Lost/M    | issing                    | Wrong Stock Pulled |  |
| L                                 | Cuffs                                  |           |            |     | Contamination                            | Main                | tenance                                    |   | Part Moved     |                           |                    |  |
|                                   | Heat Trea                              | t         |            |     | Countersink                              | Mislak              | eled                                       |   | Positioned \   | Vrong                     |                    |  |
|                                   | Inspection Strip in Tube Cut Too Short |           |            |     | Misre                                    | ad                  |  | Power Loss/                             | 'Surge         | Other                     |                    |  |
|                                   | Ripples in Bend Drill Holes            |           |            |     | Offset                                   |                     |  |   |                |                           |                    |  |
| Torque Waves in Extrusion Drawing |  |           |            |     | Out of Calibration                       |                     |  |   |                |                           |                    |  |
|                                   | Turning Sequence Finish                |           |            |     |  | Out of Sequence     |  |   |                |                           |                    |  |
| Į į                               |  |           |            |     | Folio                                    | Outside Dimensions  |  |   |                |                           |                    |  |

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| Work Orde   |                    |   |              |                 | *958  | 320*                     |              |              |               |            |               |                  | Page 4         |
|---|--------------------|---|--------------|-----------------|---|--------------------------|--------------|--------------|---------------|------------|---------------|------------------|----------------|
| Revision ID:  | D2332-04           | 41<br>Assembly 6.69" long                     |              |                 | Accept  | *N900                    | <b>040</b> ′ | 100          | )*            | Setup      | Start<br>Stop | 1 71             | S1*<br>S2*     |
|   | 1/16/13<br>1/31/13 | Start Qty: 6.00<br>Req'd Qty: 6.00            | •            | *6*<br>*6*      |   | Cust Item I<br>Customer: | D:           |              |               |            |               |                  |                |
| Approvals:  |                    | Plan:   | Date:_       |                 | Tooling: SPC (Y/N):                           |                          | ate:         |              | 2             | Run        | Start<br>Stop | *N<br>*N         | R1*<br>R2*     |
| Sequence ID/<br>Work Center II<br>180<br>*180*<br>QC<br>Quality Control | )                  | Operation Description QC5- Inspect part compl | eteness to s | tep on W/O      | Set Up/<br>Run Hours<br>0.00 AS<br>16<br>0.00 | Tool ID                  |              | Plan<br>Code | Accept<br>Qty | Rej<br>Qty |               | Reject<br>Number | Insp.<br>Stamp |
| *100* Packaging Packaging   |                    | Identify as per dwg & St<br>Memo              | ock Location | on: <b>87.2</b> | 0.00<br>0.00                                  |                          |              |              | Lox           |            |               |                  | 13-3-6         |

0.00

0.00

200

\*200\*

Quality Control

QC21- Final Inspection - Work Order Release

Memo

MLS 13-04-01 MP (3-34-01

| NCR: | Yes / No | 1 | WORK ORDER NON-CONFORMANCE / | <b>UPDA</b> 1 |
|------|----------|---|------------------------------|---------------|

Folio

| NCR: Y               | es / No    |                   | ı          |          | WORK ORDER NON-O               | CONFO    | RMANCE / UF          | PDATE                            |                         |                     |                       |
|----------------------|------------|-------------------|------------|----------|--------------------------------|----------|----------------------|----------------------------------|-------------------------|---------------------|-----------------------|
|                      | •          |                   |            |          |                                |          | •                    |                                  | QA Closed:              | Date                | e and a second of the |
| Work Orde            | er:        |                   |            |          | DISPOSITION                    |          |                      | AGAINST DE                       | PARTMENT                | /PROCESS            |                       |
| Part N               | lo         |                   |            |          | Rework<br>Scrap                |          | Skid-tube Machining  | -                                | Water Jet d. Eng. Coor. | Engineering Quality |                       |
| NCR N                | lo         |                   |            | <u> </u> | Use-as-is<br>Work Order Update | The      | rmoforming Large Fab | Rec/Store/Packaging Oth Supplier |                         |                     |                       |
| Root                 |            | T                 |            | Descri   | ption of work order update     | Initial  | Ad                   | ction                            | Sign &                  |                     | -                     |
| Cause                | Date       | Step              | Qty        |          | or Non-conformance             | Chief Er | ng Desc              | cription                         | Date                    | Verification        | QC Inspector          |
| Doc/Data             |            |                   |            |          |                                |          |                      |                                  |                         |                     |                       |
| quip/Tooling         |            |                   |            |          |                                |          |                      |                                  |                         |                     |                       |
| Operator             |            |                   |            |          |                                |          |                      |                                  |                         |                     |                       |
| Material             |            |                   |            |          |                                |          |                      |                                  |                         |                     |                       |
| Setup                |            |                   |            |          |                                | ٦.       |                      |                                  |                         | _                   |                       |
| Other                |            |                   |            |          |                                |          |                      |                                  |                         |                     |                       |
| rocess               |            |                   |            |          |                                |          |                      |                                  |                         |                     |                       |
| Supplier<br>Training |            |                   |            |          |                                |          |                      |                                  |                         |                     |                       |
| Jnapproved           |            |                   |            |          |                                |          |                      |                                  | ·                       |                     |                       |
| эпаррточеа           | l <u></u>  | 1                 | 11         |          | F                              | AULT CA  | <br>TEGORY           |                                  | 1                       | <u> </u>            |                       |
| Landin               | g Gear     |                   |            |          | General                        |          |                      |                                  |                         | . <u>.</u>          |                       |
| ſ                    | Bending    |                   |            |          | Bend                           | Grain    | 1                    |                                  | Ovalized                |                     | Pressure/Forced       |
|                      | Centre No  | ot Concer         | ntric to O | o/s      | BOM/Route                      | Hard     | ware                 |                                  | Over/Under              | tolerance           | Temperature/Cure      |
| - [                  | Cracks     |                   |            |          | Broken/Damaged                 | Inspe    | ction Incomplete     |                                  | Part Incorre            | ct                  | Weld                  |
|                      | Crushed/   | Crimpe'd.         |            |          | Burrs                          | Instru   | ictions Incomplete,  | /Unclear                         | Part Lost/M             | issing              | Wrong Stock Pulled    |
|                      | Cuffs      |                   |            |          | Contamination                  | Mair     | itenance             |                                  | Part Moved              | _                   |                       |
|                      | Heat Trea  | it                |            |          | Countersink                    | Misla    | beled                |                                  | Positioned \            | Nrong               | _                     |
|                      | Inspection | n Střip in        | Tube       |          | Cut Too Short                  | Misre    | ead                  |                                  | Power Loss/             | 'Surge              | Other                 |
|                      | Ripples in | Bend <sup>*</sup> |            |          | Drill Holes                    | Offse    | t                    |                                  |                         |                     |                       |
|                      | Torque W   | /aves in E        | xtrusion   |          | Drawing                        | Out      | f Calibration        |                                  |                         |                     |                       |
|                      |            |                   |            |          | Finish                         | Out o    | of Sequence          |                                  |                         |                     |                       |

Outside Dimensions

Date:

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

January-18-13 11:29:14 AM

Work Order ID:

95820

Parent Item:

D2332-041

Parent Item Name:

Lid Prop Assembly 6.69" long

**Start Date: 1/16/13** 

Required Date: 1/31/13

Start Qty: 6.00

Required Qty: 6.00

Comments:

IPP: B02.08.12Re-format; Incorporated D2332-13/-11/-7/-5KJ/RF

| Component Item ID/<br>Item Name                    | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location |        | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty         | Qty<br>Issued | Date<br>Issued   | Status     | `\  |
|--|------------------------|---------------|-------------|---------------------|--------|-----------------|--------------------|----------------|-------------|----------------------|---------------|------------------|------------|-----|
| AN4-4A   |                        | Purchased     | No          |                     |        | 170             | Each               | 101.0000       | 1           | 6                    | 21            | 13.3.            | 28         | -   |
| Bolt   |                        |               |             |                     |        |                 |                    |                |             |                      | · CZ          | 13-5             | <i>≥0.</i> |     |
| ~ · ·  | •                      |               |             | Location            |        | Loc Qty         | , <u>L</u>         | oc Code        |             |                      |               |                  |            |     |
|  |                        |               |             | FP001               |        | 26              |                    |                |             |                      |               |                  |            |     |
|  |                        |               |             |                     | 114615 | 6               |                    |                |             |                      | :             |                  |            |     |
|  |                        |               |             |                     | 120187 | 20              |                    |                |             |                      |               |                  |            |     |
|  |                        |               |             | ST355               | /      | 75              |                    |                |             |                      |               |                  |            | ٠.  |
|  |                        |               |             |                     | 123900 | 75              |                    |                |             | 6                    |               |                  |            |     |
| AN960JD416L<br>Washer                              | NAS1149D0416J          | Purchased     | No          |                     |        | 170             | Each               | 6.0000         | 3           | 18                   | BP.           | <u>/3-3</u>      | -28.       |     |
| . •  |                        |               |             | Location            |        | Loc Qty         | L                  | oc Code        |             |                      |               |                  |            |     |
| -  |                        |               |             | FP001               | 123741 | 6               | _                  |                | /           | 8.                   |               |                  |            |     |
| •  |                        |               |             |                     | 110153 | 6               |                    |                |             |                      |               | (-               | _          |     |
| M304R.250<br>304 SS Round bar .250                 | September 1            | Purchased     | No          |                     |        | 100             | f                  | 66.4606        | 0.1         | 0.6315792            | · F           | (2<br>F <b>2</b> | s<br>9-03  | -27 |
|  |                        |               |             | Location            |        | Loc Oty         | <u>L</u>           | oc Code        |             |                      |               | •                | 2          | ν   |
|  |                        |               |             | MAT028              |        | 66.4606         |                    |                |             |                      |               |                  |            |     |
|  |                        |               |             |                     | 114482 | 5.1             |                    |                |             |                      |               |                  |            |     |
|  |                        |               |             |                     | 120243 | 15.6838         |                    |                |             | /                    |               |                  |            |     |
|  |                        |               |             |                     | 122682 | 45.6768         |                    |                |             | 63157                |               |                  |            |     |
| <b>M304TR0.500W.035</b><br>304 RD Tube .500 x .035 | w                      | Purchased     | No          |                     |        | 110             | f                  | 411.5409       | 1.25        | 7.894737             | F             | Fi               | 3-03-      | -27 |
|  |                        |               |             | <b>Location</b>     |        | Loc Oty         | <u>L</u>           | oc Code        |             |                      |               | 5.7              |            | •   |
|  |                        |               |             | MAT017              | NESOTE | 411.54094       |                    |                | <u> </u>    | <u> </u>             |               | *                |            |     |
|  |                        | •             |             |                     | 120633 | 70.1979         |                    |                | 1           | - <del></del>        |               |                  |            |     |
| •  |                        |               |             |                     | 121848 | 59.41244        |                    |                | 8 _5        | . 368                |               |                  |            |     |
|  |                        |               |             |                     | 123303 | 201.9106        |                    |                |             | 733                  |               |                  |            |     |
| * *  |                        |               |             |                     | 123449 | 80.02           |                    |                | 4 =         | . 6 5 <del>5</del> 5 | n-            |                  |            |     |
|  |                        |               |             |                     |        |                 |                    |                | •           | 7.901                | **            |                  |            |     |
|  |                        |               |             |                     | į.     |                 |                    |                |             |                      |               |                  |            |     |

|               |         |      |     |  |                         |  |            |            | DQA:  | Date:                     |              |
|---------------|---------|------|-----|--|-------------------------|--|------------|------------|---|---------------------------|--------------|
| NCR: Ye       | es / No | •    |     |  | WORK ORDER NON-C        | ONFOR  | MANCE / UP |            | QA Closed:                                    | Date:                     |              |
| Work Order    | ·:      |      |     |  | DISPOSITION             |  |            | AGAINST DE | PARTMENT                                      | PROCESS                   |              |
| Part No       | Part No |      |     | Rework Scrap Use-as-is Work Order Update |                         | Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite |            |            | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |              |
| Root          |         |      |     | Description                              | on of work order update | Initial  | Act        | tion       | Sign &  |                           |              |
| Cause         | Date    | Step | Qty | or N                                     | lon-conformance         | Chief Eng  | Desci      | ription    | Date  | Verification              | QC Inspector |
| Doc/Data      |         |      |     |  |                         |  |            |            |   |                           |              |
| Equip/Tooling |         |      | -   |  |                         |  |            |            |   | i<br>!                    |              |
| Operator      |         | 1    |     |  |                         |  |            |            |   |                           |              |
| Material      |         | 1    |     |  |                         |  |            |            |   |                           |              |
| Setup         |         |      |     |  |                         |  |            |            |   |                           |              |
| Other         |         |      | 1   |  |                         |  |            |            |   |                           |              |

**Landing Gear** General Ovalized Bend Grain Pressure/Forced Bending BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Broken/Damaged Part Incorrect Weld Cracks Inspection Incomplete Wrong Stock Pulled Crushed/Crimped\_ Instructions Incomplete/Unclear Part Lost/Missing Burrs Cuffs Contamination Part Moved Maintenance Countersink Positioned Wrong Mislabeled Heat Treat Misread Power Loss/Surge Other Inspection Strip in Tube Cut Too Short Drill Holes Offset Ripples in Bend Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube Outside Dimensions

**FAULT CATEGORY** 

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Process
Supplier
Training
Unapproved

January-18-13 11:29:14 AM

| Work Order ID:<br>Parent Item:                     | 95820<br>D2332-041 |              |                                       |          |          |          |      |            | Date: 1/16/      |             | quired Date: 1/31/13 |
|--|--------------------|--------------|---------------------------------------|----------|----------|----------|------|------------|------------------|-------------|----------------------|
| Parent Item Name:                                  | Lid Prop Assembly  | y 6.69" long |                                       |          |          |          |      | Start      | <b>Qty:</b> 6.00 | Re          | equired Qty: 6.00    |
| <b>M304TR1.000W.049</b><br>304 RD Tube 1.00 x .049 | 9W                 | Purchased    | No                                    |          |          | 100      | f    | 23.9616    | 0.43             | 2.7157896   | FF 13-03-            |
|  |                    |              |                                       | Location | <u>n</u> | Loc Oty  |      | Loc Code   |                  |             | ·                    |
|  |                    |              |                                       | MAT01    | 3        | 23.96163 |      |            |                  |             |                      |
|  |                    |              |                                       |          | 117598   | 0.00003  |      |            |                  |             | •                    |
|  |                    |              |                                       |          | 120654   | 23.9616  |      |            | _2               | .7157       |                      |
| MS21042L4<br>Nut                                   |                    | Purchased    | No                                    |          | •        | 170      | Each | 6,818.0000 | 1                | 6           | Bl 13-3-28           |
|  |                    |              |                                       | Location | <u>n</u> | Loc Qty  |      | Loc Code   |                  |             |                      |
|  |                    |              |                                       | FP001    |          | 318      |      |            |                  |             |                      |
|  |                    |              |                                       |          | 122452   | 306      |      |            |                  | ·           |                      |
|  |                    |              |                                       |          | 8182     | 12       |      |            |                  |             |                      |
|  |                    |              |                                       | FP-001   |          | 12       |      |            |                  |             |                      |
|  |                    |              |                                       |          | 8182     | 12       |      |            |                  |             | 1                    |
|  |                    |              |                                       | GA       |          | 221      |      |            |                  |             |                      |
|  |                    |              |                                       |          | 121444   | 221      |      |            |                  |             |                      |
|  |                    |              |                                       | ST314    |          | 1767     |      |            |                  | <del></del> |                      |
|  |                    |              |                                       |          | 119017   | 20       |      |            |                  |             |                      |
|  |                    |              |                                       |          | 123248   | 900      |      |            |                  |             |                      |
|  |                    |              |                                       |          | 123355   | 847      |      |            |                  |             |                      |
|  |                    |              | · · · · · · · · · · · · · · · · · · · | ST506    |          | 1500     |      |            |                  |             |                      |
|  |                    |              | 17                                    |          | 123900   | 1500     |      |            |                  |             |                      |
|  |                    |              |                                       | ST518    | 124231   | 3000     |      |            |                  | 6           |                      |

|      |          |                                     | DQA: | Date | : |
|------|----------|-------------------------------------|------|------|---|
| NCR: | Yes / No | WORK ORDER NON-CONFORMANCE / UPDATE | ,    |      |   |

|  |  |      |  |             |   | -                          |        |  |                       |  | QA Closed: | Date         | •            |
|--|--|------|--|-------------|---|----------------------------|--------|--|-----------------------|--|------------|--------------|--------------|
| Work Order:  |  |      |  | DISPOSITION |   | AGAINST DEPARTMENT/PROCESS |        |  |                       |  |            |              |              |
| Part No  |  |      | Rework Scrap Use-as-is Work Order Update   |             | Skid-tube Crosstu  Machining Small I  Thermoforming Finish  Large Fab Compos  |                            |        | Fab Prod. Eng. Coor. Quality of the Production o |                       |  |            |              |              |
| Root   |  |      |  |             | Descri  | ption of work order update | In     | itial  | Act                   | tion   | Sign &     |              |              |
| Cause  | _  | Date | Step   | Qty         | (   | or Non-conformance         | Chie   | f Eng  | Desci                 | ription  | Date       | Verification | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training |  |      |  |             |   |                            |        |  |                       |  |            |              |              |
| Unapproved   |  |      |  |             |   |                            |        |  |                       |  |            |              |              |
|  |  |      | •  |             |   | F                          | AULT   | CATE   | GORY                  |  |            |              |              |
| Landi  | ng Ge  | ar   |  |             |   | General                    |        |  |                       |  | _          |              |              |
|  | Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence |      | Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish |             | Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread Offset Out of Calibration Out of Sequence |                            |        | Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned N Power Loss/   | ct<br>issing<br>Wrong | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other |            |              |              |
|  | $\vdash$   | _    | ict in Tub   |             | Folio   |                            | $\Box$ | Outside Dimensions   |                       |  |            |              |              |

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

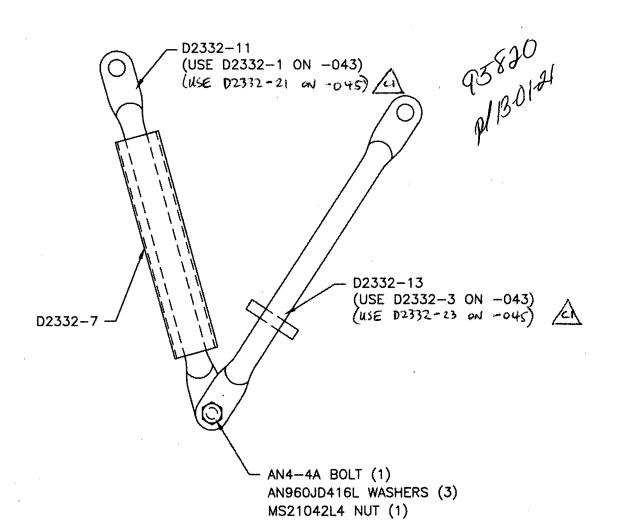




|   | DESIG | #    | DRAWN BY | DART AEROSPACE LTI<br>HAWKESBURY, ONTARIO, CANADA | Ò         |
|---|-------|------|----------|---|-----------|
| Ì | CHEC  | (EQ  | APPROVED | DRAWING NO.                                       | REV. C    |
|   |       | #    | 1 #      | D2332 SHE   | ET 1 OF 2 |
| I | DATE  |      |          | TILE  | SCALE     |
|   | 03.0  | 7.03 | 21112    | LOD PROP ASSEMBLY                                 | NTS       |
|   | Α     |      | 94.12.16 | NEW ISSUE   |           |
| 1 | _     |      |          | 0111105 440 4404500 70 4401                       |           |



| 03.0  | 7.03        | LOD PROP ASSEMBLY NTS   |
|-------|-------------|---|
| <br>Α | 94.12.16    | NEW ISSUE   |
| В     | 97.09.30    | CHANGE 416 WASHERS TO 416L  |
| С     | 03.07.03    | MAKE -041 PROP 6.69" LONG (STD)<br>MAKE -043 PROP 8.00" LONG (OPT.) |
| CI    | AU 03.08.06 | ADD - 045 FEDF (7.25" LONG)   |



D2332-041 SHOWN (D2332-043 SIMILAR) (02332-045 SIMILAR) /CA

